

Abstract Submitted
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VIP2 – An experiment at LNGS for testing the Pauli Exclusion Principle for Electrons¹ JOHANN MARTON, Stefan Meyer Institute, Austrian Academy of Sciences, VIP2 COLLABORATION — The Pauli Exclusion Principle (PEP) is one of the cornerstones of quantum physics. The validity of PEP is extremely well confirmed by many observations. However tiny violations of PEP are subject to experiments at underground laboratories like LNGS/Gran Sasso, Italy. The experiments VIP and the follow-up experiment VIP-2 are searching for small violations of the PEP for electrons which would result in forbidden X-ray transitions in copper atoms. The experimental method, final results obtained with VIP and the recently installed VIP-2 experiment at Gran Sasso to further increase the sensitivity by 2 orders of magnitude will be presented.

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